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Serial Nr.: 09/924,916

Art Unit: 2112

UPA-01188

**REMARKS** 

In the Office Action, claims 1-2, 3 and 5 are rejected under 35 U.S.C. §112 as

being indefinite, claims 1 and 3 are rejected under 35 U.S.C. §102(b) as being anticipated

by Hartung, claims 2 and 5 are rejected under 35 U.S.C. §103(a) as being unpatentable

over Hartung in view of industry standard response format and evidenced by Lin, and

claim 4 is rejected under 35 U.S.C. §103(a) as being unpatentable over Hartung in view

of industry standard response format and evidenced by Estakhri.

Claim 1 is now amended to correct the indefiniteness and particularly point out

and claim the subject matter of this invention. In particular, claim 1 now includes the

<u>limitation that at least a program code is provided to the IDE hard disk drive controller to</u>

respond to the ATA interface with a virtual storage device having data for all sectors

other than sector 0 when there is no real storage device connected to the IDE HDD

controller via the ATA interface, or to disable response of the virtual storage device to the

ATA interface if a real storage device is connected. The limitation is not taught or

anticipated by the prior arts cited in the office action.

Hartung et al. teach an interface apparatus (nest) to isolate an IDE device from the

active IDE bus until initialization of the IDE device so that the connection of the IDE

device will not corrupt the IDE bus. A nest driver is executed for computer systems to

determine if a nest is connected to the host, if an IDE device has been inserted in the nest

and when the IDE device in the nest has been initialized. As disclosed in Hartung et al.,

the interface apparatus relies on a non-standard device driver in the operating system of

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MAY-08-2004 05:06 FROM: JASON Z LIN

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the computer to function properly. The requirement of a non-standard device driver is

the drawback of the conventional art that the instant invention tries to overcome.

The hot-swap device of the instant invention comprises an IDE hard disk drive

controller which is built in with special hardware and program to respond to a standard

device driver with either a virtual storage device when there is no real storage device is

connected or to allow a real storage device to respond directly when there is one

connected. By means of the special hardware and program, no non-standard device driver

is required in the operating system. It is clear that the instant invention as claimed in the

amended claim 1 is neither taught nor suggested by Hartung et al. and should be

allowable. By virtue of dependency, the amended claims 2-4 should also be allowable.

Claim 5 is cancelled.

From the foregoing discussion, it is clear that the instant invention differs from the

cited prior arts. The physical difference results in different effects and is not obvious. The

specification has been amended to correct a few editorial and grammatical errors. Claims

1-4 are submitted for allowance. Prompt and favorable reconsideration of the application

is respectfully solicited.

Respectfully submitted,

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Agent for Applicants

Red No. 37 492

(408) 867-9757